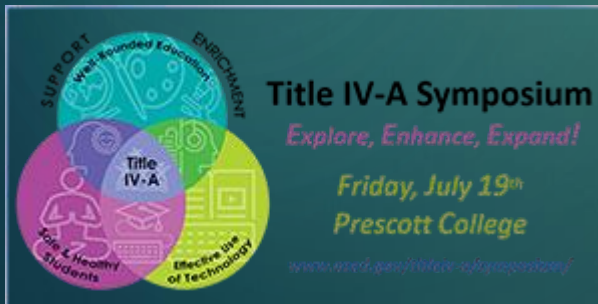
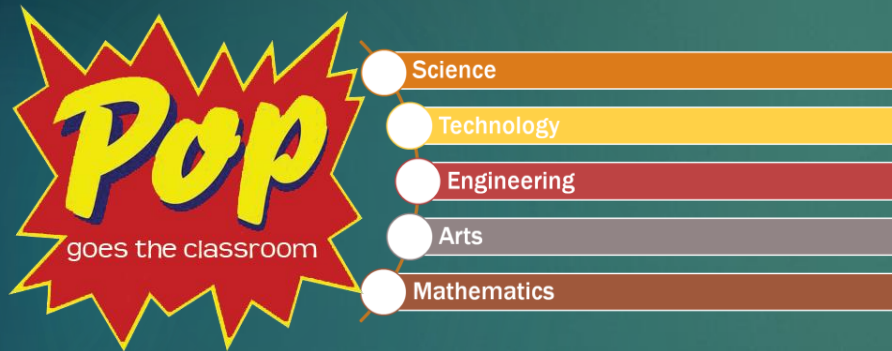




# STEAM Education: Webbing for Cross- Curricular Integration



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# Presenters

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# Today's Outcomes

1. I can define STEAM & Cross Curricular Integration
2. I can use different approaches and methodologies for designing cross curricular units
3. I can plan a STEAM unit and align it to multiple content standards.
4. I can access high quality STEAM reference materials to assist me in my STEAM lesson development.



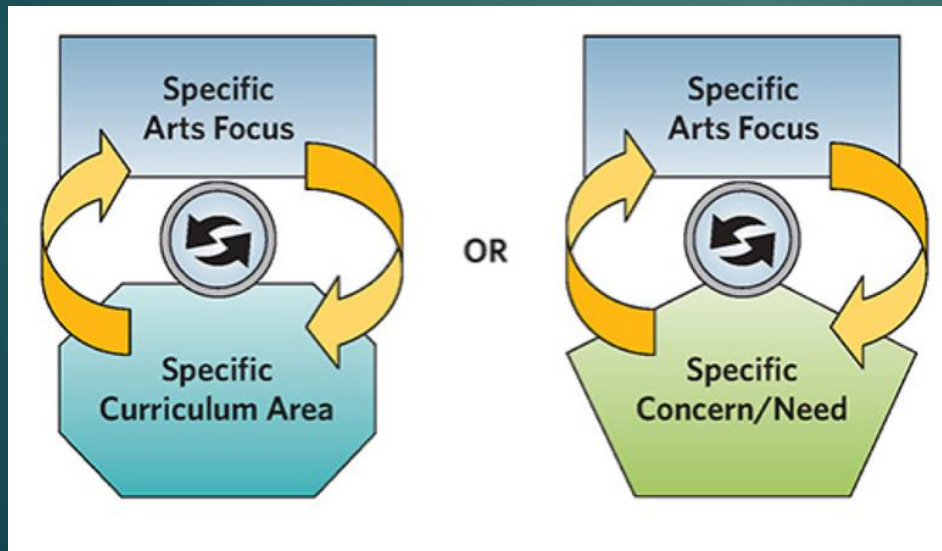
# ICEBREAKER



# Arts Integration VS. Arts Education

## Arts Integration


“Arts Integration is teaching and learning in which arts learning and other academic learning are connected in ways in which arts learning AND the other academic learning are both deepened.”  
(Chicago Arts Partners in Education CAPE)



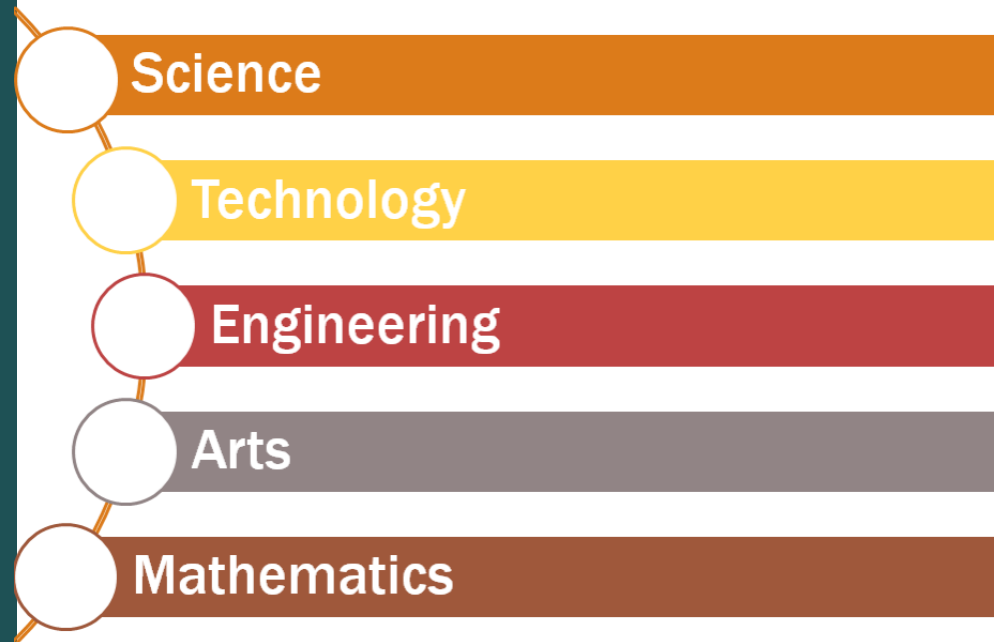

## Arts Education

Arts education furthers students' content knowledge and develops students' artistic literacy through study of one of the 5 core arts disciplines:

Music  
Visual Arts  
Dance  
Theatre  
Media Arts

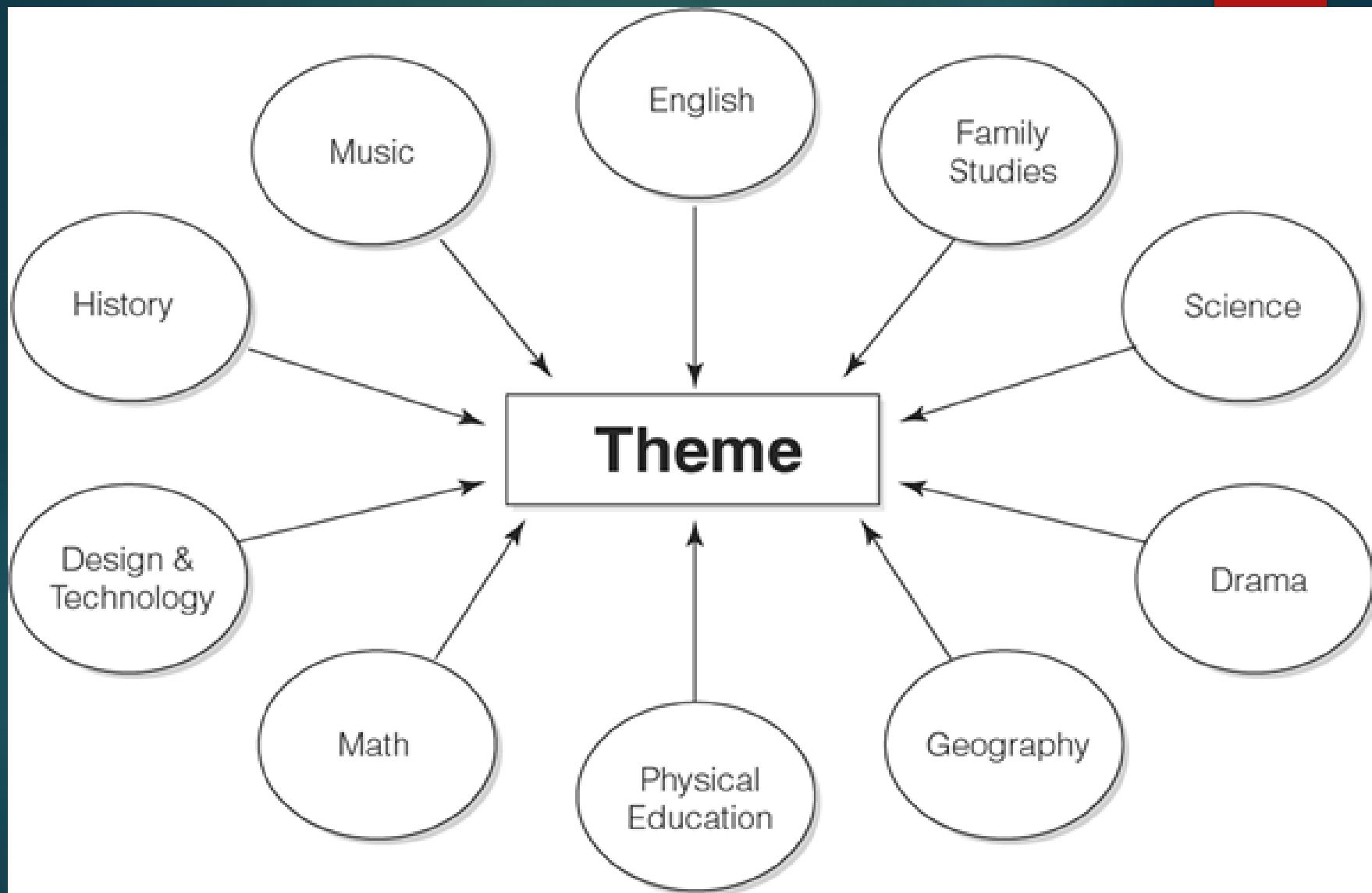


***STEAM Integration is an approach to learning in which students construct knowledge and demonstrate their understanding using a creative process that includes content across multiple disciplines.***

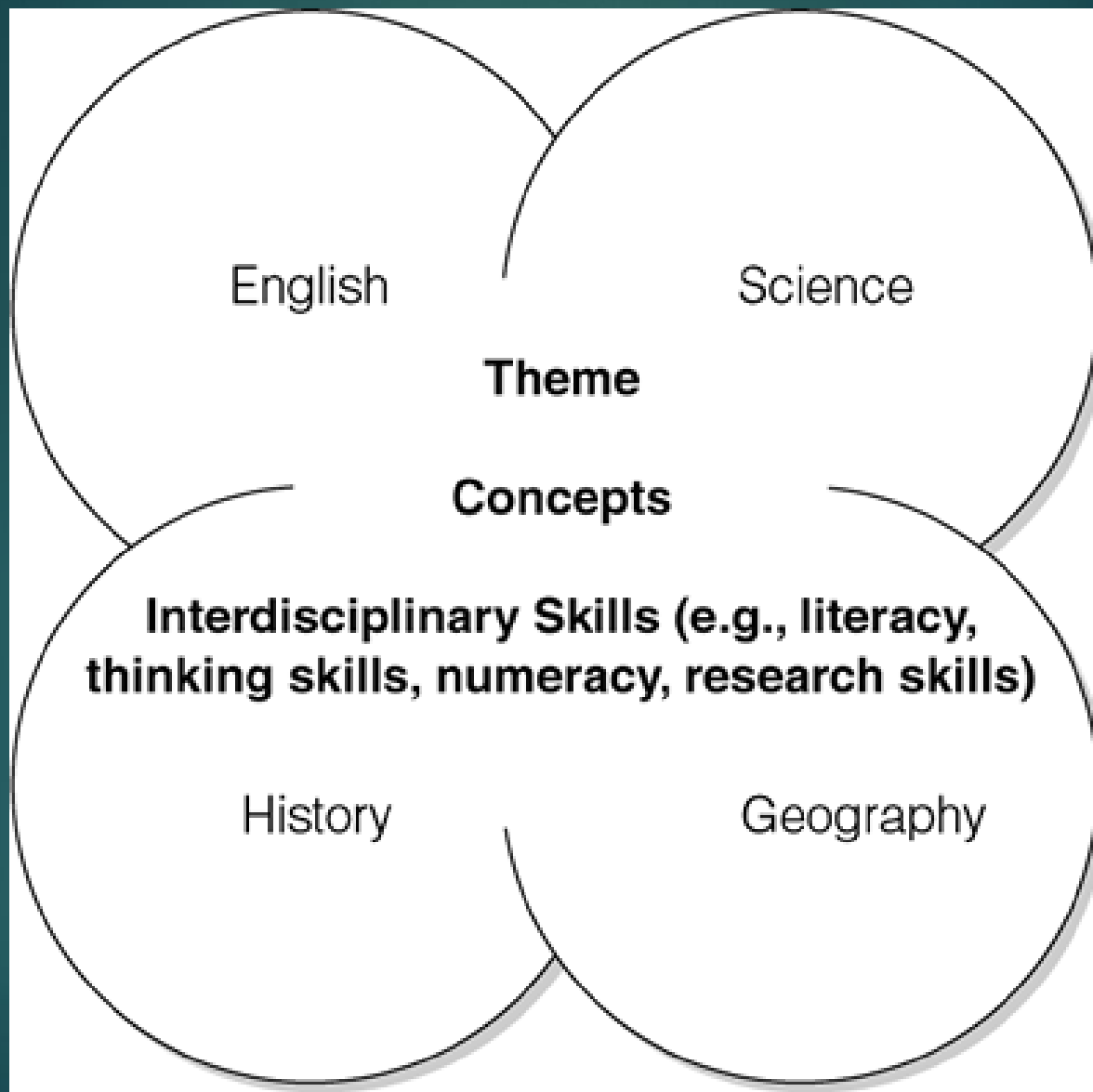


An approach to teaching and learning that :

1. Places the learner at the center of the experience
2. Focused on outcomes rather than outputs









# Subject Areas

Theme

Concepts

Life Skills

Real-World Context

Student Questions

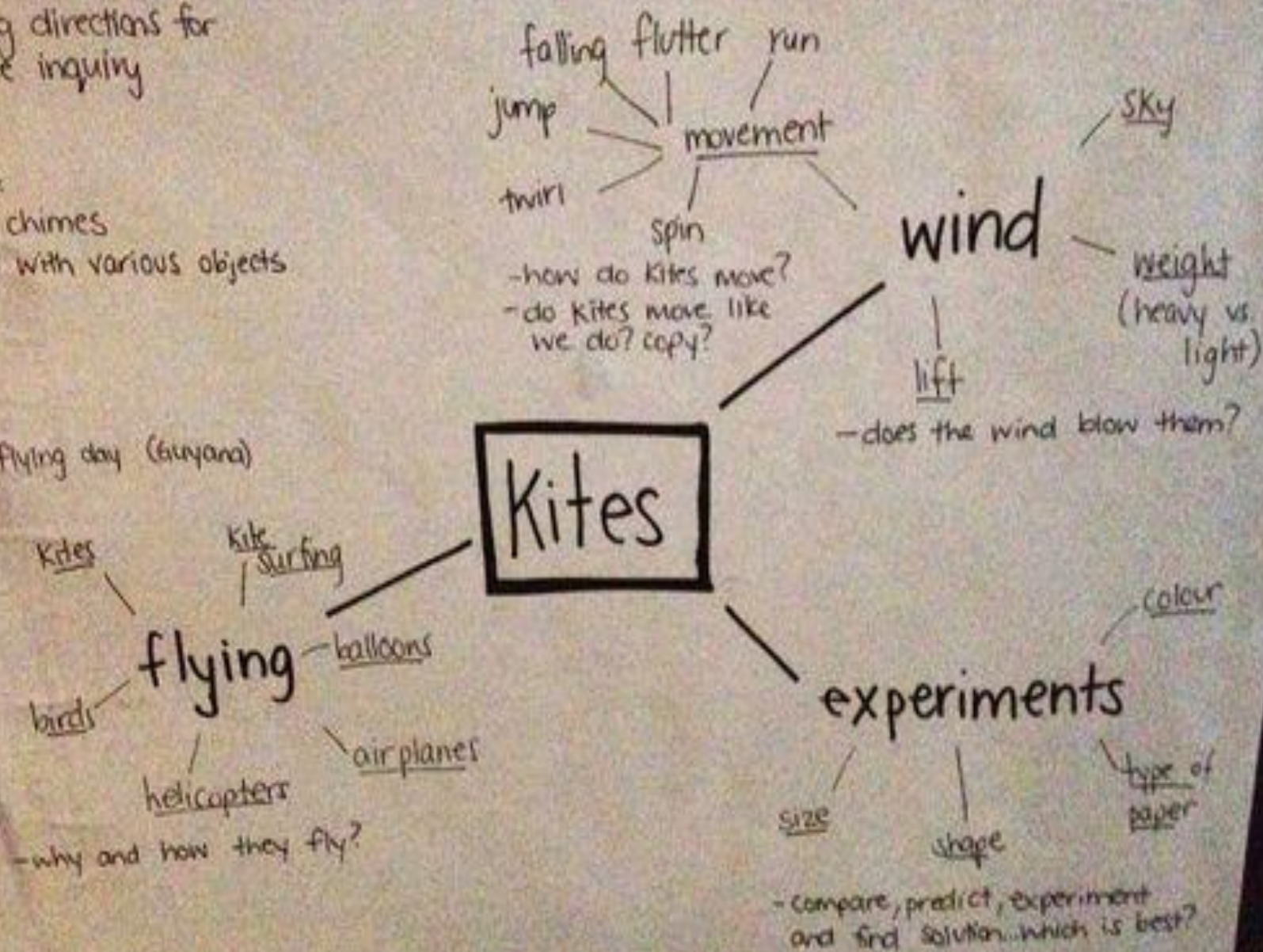
Planning directions for  
our kite inquiry

To make:

- wind chimes
- mobile with various objects
- Kites

Other:

- Kite flying day (Guyana)







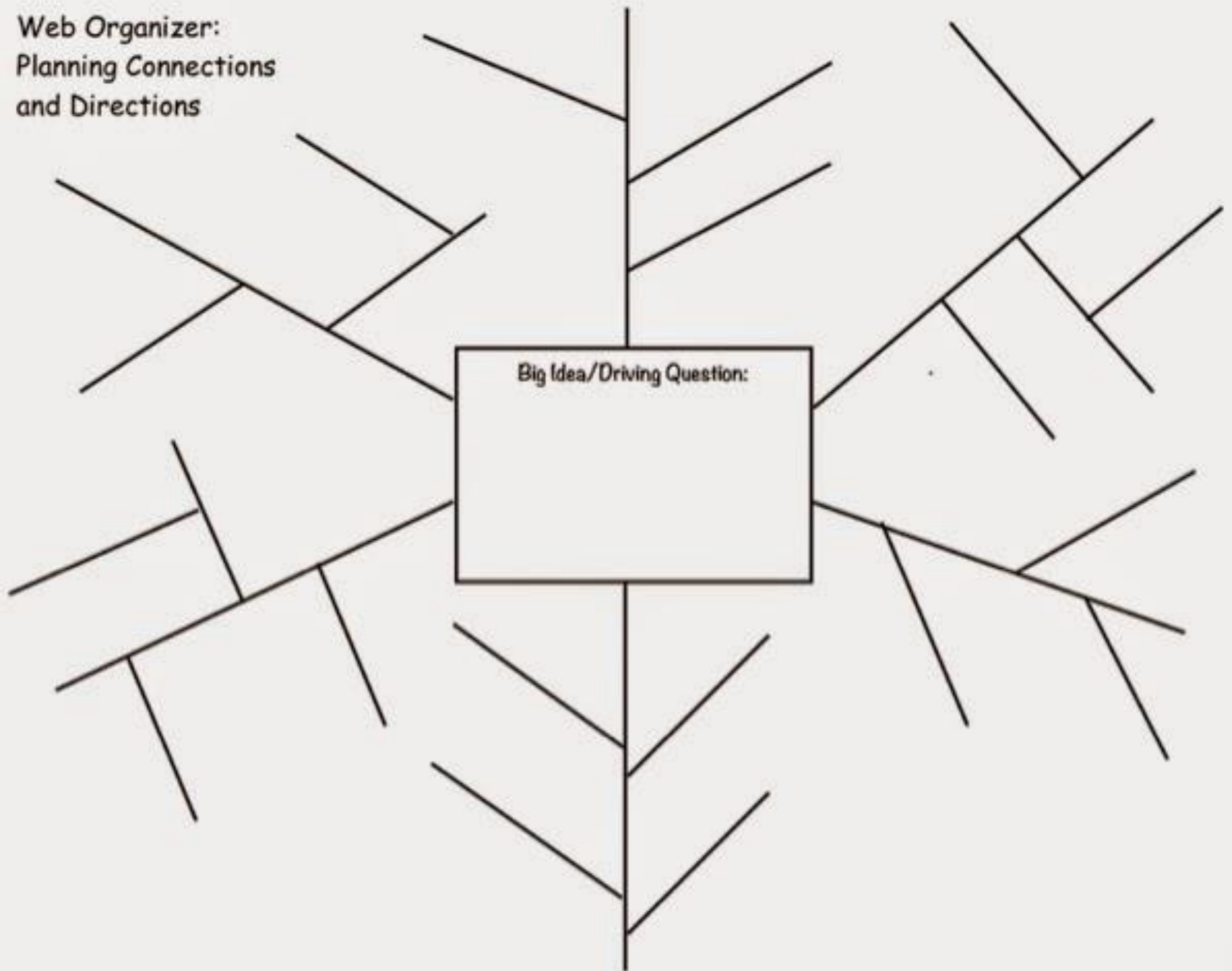
**Planets Path  
on the  
Playground**

**Dwarf  
Planets**

**STEM**



Web Organizer:  
Planning Connections  
and Directions



# STEAM Classroom Example: Artsedge Kennedy Center

Science & Dance (3rd Grade) 5:30 mins

<https://artsedge.kennedy-center.org/educators/how-to/arts-integration/arts-integration-in-practice/science>

What are some elements of STEAM education you observed the classroom example?



# Arts Integration Checklist

# The Kennedy Center

## Approach to Teaching

- ☐ Are learning principles of Constructivism (actively built, experiential, evolving, collaborative, problem-solving, and reflective) evident in my lesson?

## Understanding

- ☐ Are the students engaged in constructing and demonstrating understanding as opposed to just memorizing and reciting knowledge?

## Art Form

- ☐ Are the students constructing and demonstrating their understandings through an art form?

## Creative Process

- ☐ Are the students engaged in a process of creating something original as opposed to copying or parroting?
- ☐ Will the students revise their products?

## Connects

- ☐ Does the art form connect to another part of the curriculum or a concern/need?
- ☐ Is the connection mutually reinforcing?

## Evolving Objectives

- ☐ Are there objectives in both the art form and another part of the curriculum or a concern/need?
- ☐ Have the objectives evolved since the last time the students engaged with this subject matter?

# Design a STEAM Unit

## Arts Integration Unit Planning Template

<p><b>Central Question(s):</b> What is the earth's relationship to the sun? How can we use movement to demonstrate our understanding of the physical world?</p>	<p><b>Learning &amp; Arts Standards Addressed:</b></p> <hr/> <p><b>3.E1U1.4</b></p> <p><b>Construct an explanation</b> describing how the Sun is the primary source of energy impacting Earth systems.</p> <p>Grade 3 DA.CN.10.1.3 a. Analyze and compare dance elements that elicit a specific personal response. Discuss ideas and feeling b. Investigate an idea from another discipline of study and express the information through movement. Create visual or movement form.</p>
<p><b>Arts Concept &amp; Content Area(s) Pairing:</b></p> <p>Science &amp; Dance</p>	
<p><b>Ideas for Scaffolding Learning Content:</b></p> <p>Watch science videos, independent library research, model demonstration</p>	<p><b>Projects/Products Created:</b></p> <p>Movements that represent science concepts</p>
<p><b>Ideas for Scaffolding Arts Concept:</b></p> <p>Exploring different qualities of movement, creating gestures to represent concepts,</p>	<p><b>Culminating Event(s):</b></p> <p>Dance performance</p>
<p><b>Materials and Resources to Use:</b></p> <p>Science Videos, Globe, Flashlight, Library Books, Music</p>	<p><b>Assessment and/or Reflection Plan:</b></p> <p>Student presentation &amp; written reflection about section of choreography they developed.</p>



# Exit Activity



# Thank you for your participation!

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